Amended claims:

1. (Amended) A zener zap diode device comprising

a p-doped emitter region formed in a n-type tub defining a collector,

a n-doped region formed in the tub and spaced from the p-doped emitter region, thereby defining a p-n junction between the p-doped emitter region and the tub or between the n-doped region and the tub depending on the doping of the tub, and

A1 a refractory metal silicide extending over part of at least the p-doped region, wherein the configuration of the device is such that the refractory metal silicide will form a silicide bridge across the p-n junction when a fusing current is established across the junction.

3. (Amended) A device of claim 1, wherein the refractory metal silicide is Cobalt silicide.

4. (Amended) A device of claim 1, wherein the silicide bridge is formed to extend between the silicide on the p-doped region and the silicide on the n-doped region or, if there is no A2 silicide on the n-doped region, to a contact on the n-doped region.

5. (Amended) A device of claim 1, wherein the dopant of the p-doped region is obtained from a p-doped polysilicon layer and the dopant of the n-doped region is obtained from a n-doped polysilicon layer, and the p-doped polysilicon layer and n-doped polysilicon layer are part of two different polysilicon layers in a multi-poly process.

7. (Amended) A device of Claim 1, wherein the configuration of the device is such that the distance across which the bridge has to be formed is sufficiently short and the resistance path across which the bridge has to be formed is sufficiently low so as to allow the A3 fusing current to be sufficiently low to avoid undesirable damage to the device when the fusing current is established across the junction.

8. (Amended) A device of claim 1, wherein the dopant of the p-doped region is obtained from a p-doped polysilicon layer and the dopant of the n-doped region is obtained from

a n-doped polysilicon layer, and wherein said n-doped polysilicon layer and p-doped polysilicon layer are spaced from each other by at least a nitride spacer.

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9. (Amended) A zener zap diode device comprising

a p-doped emitter region formed in a n-type tub defining a collector,

a n-doped region formed in the tub that is spaced from the p-doped emitter region, thereby defining a p-n junction between the p-doped emitter region and the tub or between the n-doped region and the tub depending on the doping of the tub,

a refractory metal silicide extending across the junction.

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13. (Amended) A zener zap diode device, comprising

an emitter region of a first polarity in a collector of opposite polarity to define a p-n junction,

a base region with the same polarity as the collector, spaced from the emitter region, and

refractory metal silicide material in electrical contact with the emitter and base regions, wherein the configuration of the device is such that the refractory metal silicide will form a silicide bridge across the p-n junction when a fusing current is established across the junction.

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18. (Amended) A device of claim 13, wherein the first and second regions are formed in the tub and the dopant of the first and second regions is obtained from two different poly layers in a double poly process.

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21. (Amended) A method of forming a zener zap diode device, comprising

forming a first polysilicon layer on a n-type silicon,

n-doping the first polysilicon layer to form a n-base in the n-type silicon,

forming a second polysilicon layer on the n-type silicon, spaced from the first polysilicon layer,

p-doping the second polysilicon layer to form a p+ emitter in the n-type silicon, spaced from the n-base,

depositing a refractory metal layer on at least part of the second polysilicon layer,

reacting the refractory metal with silicon to form a silicide, and

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establishing a current between the first and second polysilicon layers to create a silicided bridge formed from the metal silicide to form a low resistance path between contacts to the first and second polysilicon layers, wherein the steps are performed in an order suitable for a double poly process.

24. (Amended) A method of forming a zener zap diode device, comprising

forming a first polysilicon layer on a p-type silicon,

p-doping the first polysilicon layer to form a p-base in the p-type silicon,

forming a second polysilicon layer on the p-type silicon, spaced from the first polysilicon layer,

n-doping the second polysilicon layer to form a n+ emitter in the p-type silicon, spaced from the p-base,

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depositing a refractory metal layer on at least part of the first polysilicon layer,

reacting the refractory metal with silicon to form a silicide, and

establishing a current between the first and second polysilicon layers to create a silicided bridge formed from the metal silicide to form a low resistance path between contacts to the first and second polysilicon layers, wherein the steps are performed in an order suitable for a double poly process.